

3768

C. & G. SURVEY,  
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Form 504  
DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

State: *Virginia*

11-5613

DESCRIPTIVE REPORT.

*Hydrographic* Sheet No. *3768*

LOCALITY:

*Entrance to Chesapeake Bay*

*1915*

CHIEF OF PARTY:

*P. C. Whitney & R. F. Luce*

3768

Hyd. 3768

General Locality: Coast of Virginia.

Special Locality: Chesapeake Bay Entrance.

Vessels: Bache and Isis.

Chiefs of Party: Paul C. Whitney and R.F. Luce.

Date: August, 1915 and October - November, 1915.

Scale: 1/40,000

*Projected by F.W. Garvin and G. Olsen*

*Soundings in feet*

*Plane of reference mean low water*

General Locality:- Coast of Virginia.

Special Locality:- Chesapeake Bay Entrance.

Date:- August and November, 1915.

Vessels:- Bache and Isis.

Chiefs of Party:- Paul C. Whitney and R. F. Luce.

Scale:- 1/40,000.

Boat Sheet.

Note: Smooth Sheet forwarded January 27, 1916.

# 3768

Descriptive Report

to accompany Hydrographic Sheet 3768

Chesapeake Bay Entrance

August-November, 1915.

The hydrography executed on this sheet was done in compliance with instructions to the Commanding Officer, Steamer Isis, dated July 22, 1915 and supplemental instructions dated August 20, 1915, October 7, 1915 and to the Commanding Officer, Steamer Bache, October 23, 1915. The work was commenced by the Steamer Isis, under Assistant Luce on August 23, 1915 and discontinued by him on August 31, 1915 on account of target practice by the Atlantic Fleet in that vicinity.

On October 26th it was taken up again by the Steamer Bache, under my direction and continued until November 30, 1915 when work was stopped for the season.

A tide staff was established by Assistant Luce on the railway bridge across Lynnhaven Inlet and observations were made by him from August 23rd to October 14th and by me from October 26th to December 1, 1915. The plane of reference established by this series and computed by the field party is 2.8 feet on the staff.

The signals used were either plotted from previous triangulation or furnished by Assistant Latham, who built and located Shoal, Bel, and Mink. The buoys which were already established for navigating purposes were located by several

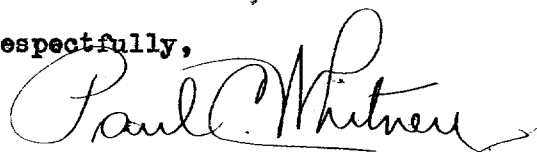
cuts taken from the ship and in all cases agree very well. These buoys were used quite extensively as hydrographic signals.

Owing to the lateness of the Bache commencing this work I confined myself to the inshore section of the sheet, the lines running out to the limit of visibility of the shore signals, which was about 14 miles off shore. This area was developed by 1/2 mile or less lines outside of the 40 foot curve and 100 meter to 400 meter lines inside of it. Two reported shoals lying outside of the 40 foot curve were searched for but with no results and I don't believe they exist, at least not in the vicinity of the reported localities.

My present instructions are to continue this work out to the 100 fathom curve next summer and therefore this sheet should be held ready to be returned to the field upon request. The boat sheet is held aboard for use then and will not be sent to the office unless requested.

The work of the Steamer Isis was confined to the northern part of the sheet. The Bache crossed some of the Isis work near Shark Shoal, but could find no indication of the shoal sounding as shown on the chart.

Respectfully,

  
Chief of Party, C. & G. Survey.

List of Statistics  
to accompany Hydrographic Sheet 3768

Chesapeake Bay Entrance

August - November, 1915.

Date: 1915		Letter	Vol.	Statute Miles	Positions	Soundings	Vessel
(Red)							
August	23	A	1	29.2	68	491	Isis
"	24	B		73.2	159	1123	"
"	25	C		41.3	91	709	"
"	25	C	2	22.3	51	398	"
"	30	D		38.0	96	750	"
"	31	E		4.6	15	80	"
Totals for Str. Isis				208.6	480	3551	
(Blue)							
October	26	A	1	23.4	77	486	Bache
"	27	B		42.4	128	878	"
"	28	C		44.9	157	723	"
"	28	C	2	7.5	29	118	"
"	29	D		58.0	200	1165	"
November	3	E		27.5	102	468	"
"	4	F		19.6	76	292	"
"	4	F	3	32.4	100	444	"
"	5	G		39.2	150	609	"
"	6	H		22.1	77	426	"
"	11	J		25.3	93	459	"
"	11	J	4	9.5	30	170	"
"	17	K		40.8	156	751	"
"	18	L		51.9	184	937	"
"	22	M		8.6	34	218	"
"	22	M	5	33.6	108	538	"
"	23	N		57.5	193	936	"
"	24	P		25.5	99	403	"
"	30	Q		7.4	29	147	"
"	30	Q	6	19.8	69	409	"
Totals for Str. Bache				596.9	2091	10777	
Grand totals -----				805.5	2571	14328	

## Nyd @ Sheet #3768.

The hydrography on this sheet was performed during the season of Aug - Nov. 1915. The work was protracted in the field and the checking of several positions demonstrates sufficiently that the work of protracting was carefully done.

The final examination of the plotted sheet shows that the present survey did not succeed in establishing shoals of lesser depth than those charted, and moreover the parties did not find some of the shoals established by the old surveys.

In places, where a more careful development was deemed necessary, a number of cross lines were run, but in several cases the crossings do not agree very well, the difference in depth ranging from two to four feet.

The area beyond the 40 ft. curve was developed by  $\frac{1}{2}$  mile lines and this system was also carried on in places where the chart shows isolated 6 fathom spots, whose existence should have been more closely developed.

The 17 foot Smith Id. shoal has not been examined, due probably to lack of time. Similarly, the 27, 33, and 34 ft. isolated shoals on the axis of the "Smith Id. shoal" have not been located and should remain on the chart until their existence is more definitely determined.

The charted 17 ft. Shark Shoal was fairly well developed by two systems of sounding lines, but the parties have not succeeded in finding any indications of the above shoal.

The spot beyond the 48 foot curve, where a 24 ft. shoal was reported by the Luckenbach Steamship Co. (see letter 202-15) has been carefully examined and the development sufficiently demonstrates the non-existence of the reported obstruction.

On the whole the work was very well arranged and the records kept in good shape.

J.B. McKean

May 23-1917



VEC  
Apr. 27, 1917

HYDROGRAPHIC SHEET 3768.

Chesapeake Bay Entrance, Virginia, by Assistant R. F. Luce  
and Assistant P. C. Whitney in 1915.

TIDES.

	Lynnhaven Inlet. Feet.
Mean low water, or plane of reference on staff	2.8
Mean range of tide	2.0